AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A method in a computer system for storing element chunks of elements in a file format~~storage area~~, the elements being variable sized data records arranged in a format that can be interpreted by a computer program comprising:

storing at least one root storage in a storage area;

~~storing a model directory in said at least one root storage;~~

storing at least one model in said root storage, the model including a model header stream, a model header stream, the model header stream including at least one of a model name, units, or a geometric range for the model; ~~model directory~~

storing a graphic element list and a control element list in said at least one model, said graphic element list ~~having~~ including element chunks containing graphic elements having a physical representation and said control element list having element chunks containing control elements having no physical representation;

assigning a preselected number of elements to each element chunk; and

allocating each element to an element chunk in one of said control element list and said graphic element list, the element chunks being variable sized and having a unique name and a fixed header including at least one of a number of elements in the element chunk, a compression scheme, or an encryption scheme for the elements.

2. (Original) The method of claim 1, further comprising:

compressing each element chunk; and

storing at least one compressed element chunk in at least one of said graphic element list and said control element list.

3. (Original) The method of claim 1, further comprising:

encrypting each element chunk; and

storing at least one encrypted element chunk in at least one of said graphic element list and said control element list.

4. (Original) The method of claim 1, further comprising:

compressing and encrypting each element chunk; and

storing at least one compressed and encrypted element chunk in at least one of said graphic element list and said control element list.

5. (Original) The method of claim 1, wherein said preselected number is a maximum number of elements.

6. (Original) The method of claim 1, further comprising the steps of:

creating an additional element chunk when the number of elements exceeds said preselected number of elements assigned to each element chunk;

assigning said preselected number of elements to said additional element chunk; and

storing new elements in said additional element chunk.

7. (Original) The method of claim 6, further comprising:

compressing each new element chunk; and

storing each new compressed element chunk in at least one of said graphic element list and said control element list.

8. (Original) The method of claim 6, further comprising:

encrypting each new element chunk; and

storing each new encrypted element chunk in at least one of said graphic element list and said control element list.

9. (Original) The method of claim 6, further comprising:

compressing and encrypting each new element chunk; and

storing each new compressed and encrypted element chunk in at least one of said graphic element list and said control element list.

10. (Original) The method of claim 6, wherein said preselected number is a maximum number of elements.

11. (Original) The method of claim 1, further comprising the step of associating a header with said at least one root storage.

12. (Original) The method of claim 1, wherein the computer system is the Internet.

13. (Original) The method of claim 1, wherein the computer system is an Intranet.

14. (Original) The method of claim 1, wherein the computer system is a local area network.

15. (Original) The method of claim 1, wherein said storage area is a file.

16. (Original) The method of claim 1, wherein said storage area is adapted to be operable with a computer aided design program.

17. (Original) The method of claim 1, further comprising storing in said root storage at least one of a first stream containing a header, a second stream containing session information, a third stream containing a manifest and a fourth stream containing file properties.

18. (Currently amended) The method of claim 1, further comprising the step of storing in the root storage at least one of a stream and a storage~~, neither of which are contained in the model directory~~.

19. (Currently amended) A method in a computer system for storing element chunks of elements in a file format in a storage area, comprising:

storing at least one root storage in a storage area;

storing at least one model directory in each root storage;

storing a control model in each root storage;

storing at least one model in said model directory;

creating a model header stream for the model, the model header stream including at least one of a model name, units, or a geometric range for the model;

storing a graphic element list and a control element list in each model and each control model directory, said graphic element list ~~having~~ including element chunks containing graphic elements having a physical representation and said control element list having element chunks containing control elements having no physical representation;

assigning a preselected number of elements to each element chunk, the elements being variable sized data records arranged in a format that can be interpreted by a computer program; ~~and~~

allocating each element to an element chunk in one of said control element list and said graphic element list, the element chunks being variable sized; and

creating a unique name and a fixed header for each element chunk, the fixed header including at least one of a number of elements in the element chunk, a compression scheme, or an encryption scheme for the elements.

20. (Original) The method of claim 19, further comprising:

compressing each element chunk; and

storing at least one compressed element chunk in at least one of said graphic element list and said control element list.

21. (Original) The method of claim 19, further comprising:

encrypting each element chunk; and

storing at least one encrypted element chunk in at least one of said graphic element list and said control element list.

22. (Original) The method of claim 19, further comprising:

compressing and encrypting each element chunk; and

storing at least one compressed and encrypted element chunk in at least one of said graphic element list and said control element list.

23. (Original) The method of claim 19, wherein said preselected number is a maximum number of elements.

24. (Original) The method of claim 19, further comprising the steps of:

creating an additional element chunk when the number of elements exceeds said preselected number of elements assigned to each element chunk;

assigning a preselected number of elements to said additional element chunk; and

storing new elements in said additional element chunk.

25. (Original) The method of claim 24, further comprising:

compressing each additional element chunk; and

storing each additional compressed element chunk in at least one of said graphic element list and said control element list.

26. (Original) The method of claim 24, further comprising:

encrypting each additional element chunk; and

storing each additional encrypted element chunk in at least one of said graphic element list and said control element list.

27. (Original) The method of claim 24, further comprising:

compressing and encrypting each additional element chunk; and

storing each additional compressed and encrypted element chunk in at least one of said graphic element list and said control element list.

28. (Original) The method of claim 24, wherein said preselected number is a maximum number of elements.

29. (Original) The method of claim 19, further comprising the step of associating a header with said at least one root storage.

30. (Original) The method of claim 19, wherein the computer system is the Internet.

31. (Original) The method of claim 19, wherein the computer system is an Intranet.

32. (Original) The method of claim 19, wherein the computer system is a local area network.

33. (Original) The method of claim 19, wherein said storage area is a file.

34. (Original) The method of claim 19, wherein said storage area is adapted to be operable with a computer aided design program.

35. (Original) The method of claim 19, further comprising storing in said root storage at least one of a first stream containing a header, a second stream containing session information, a third stream containing a manifest and a fourth stream containing file properties.

36 (Original) The method of claim 19, further comprising the step of storing at least one of a stream and a storage, neither of which are contained in the model directory, in the root storage.

Claims 37-116 (Canceled)

117. (Currently amended) A method in a computer system for reading a modified compressed element chunk in a file format in a main storage area, comprising:

storing at least one root storage in the main storage area;

storing a model directory in said at least one root storage;

storing at least one model including a graphic element list and a control element list in each model directory;

storing at least one compressed element chunk in each graphic element list and control element list, wherein each said compressed element chunk comprises compressed elements, the elements being variable sized data records arranged in a format that can be interpreted by a computer program, the element chunks having a unique name and a fixed header including at least one of a number of elements in the element chunk, a compression scheme, or an encryption scheme for the elements;

storing said at least one root storage in a temporary memory;

decompressing said compressed element chunks and compressed elements in said graphic element list and said control element list;

modifying elements in the temporary memory;

flagging said decompressed element chunks having said modified elements in said temporary memory with a dirty flag;

compressing said flagged element chunks to provide modified compressed element chunks after a predetermined idle time has passed;

replacing said compressed element chunks in the main storage area with said modified compressed element chunks; and

reading said modified compressed element chunks.

118. (New) The method of claim 1, further comprising:

storing at least one model in a model directory; and

storing the model directory in the root storage, the model directory including list of the models, the models having a unique name within their respective model directory.